

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-20. (Canceled)

21. (Currently amended) A method for inducing chondrogenesis, said method comprising administering an effective amount of a composition comprising
(1) ~~purified CD105+ non-tissue culture expanded~~ cells isolated from bone marrow
~~by the following process:~~

~~(a) isolating mononuclear cells from bone marrow;~~

~~(b) incubating the cells with anti-CD105 antibody microbeads; and~~

~~(c) isolating the cells bound to the microbeads,~~

and

(2) a suitable matrix carrier.

22. (Canceled)

23. (Previously presented) The method of claim 21 further comprising administering a bone and or cartilage inducing factor.

24. (Original) The method of claim 23 wherein said factor is a BMP.

25. (Currently amended) The method of claim 24 wherein ~~said~~the BMP is selected from the group consisting of BMP-2 and or BMP-9.

26. (Currently amended) A method for treating arthritis, said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
- (b) incubating the cells with anti-CD105 antibody microbeads; and
- (c) isolating the cells bound to the microbeads,

and

(2) a suitable matrix carrier.

27. (Currently amended) A method for treating articular cartilage defects or damage, said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
- (b) incubating the cells with anti-CD105 antibody microbeads; and
- (c) isolating the cells bound to the microbeads,

and

(2) a suitable matrix carrier.

28. (Currently amended) A method for repairing cartilage tissue said method comprising administering an effective amount of a composition comprising

(1) purified CD105+ non-tissue culture expanded cells isolated from bone marrow by the following process:

- (a) isolating mononuclear cells from bone marrow;
 - (b) incubating the cells with anti-CD105 antibody microbeads; and
 - (c) isolating the cells bound to the microbeads,
- (2) a suitable matrix carrier; and
- (3) a factor selected from a bone inducing factors and cartilage inducing factors.
29. (Previously presented): The method of claim 28 wherein said factor is a BMP.
30. (Canceled)
31. (Currently amended) The method of claim 29 wherein said-the BMP is selected from the group consisting of BMP-2 and or BMP-9.
32. (New) The method of claim 26, further comprising administering a bone and or cartilage inducing factor.
33. (New) The method of claim 32, wherein said factor is a BMP.
34. (New) The method of claim 33, wherein the BMP is BMP-2 or BMP-9.
35. (New) The method of claim 27, further comprising administering a bone and or cartilage inducing factor.
36. (New) The method of claim 35, wherein said factor is a BMP.
37. (New) The method of claim 36, wherein the BMP is BMP-2 or BMP-9.